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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/524,777

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EXAMINER

CAVALLARI, DANIEL J

ART UNIT

PAPER NUMBER

2836

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

12/28/2006

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/524,777	Applicant(s) YOSHIKAWA ET AL.	
	Examiner Daniel J. Cavallari	Art Unit 2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6,8 and 16-26 is/are pending in the application.
- 4a) Of the above claim(s) 19-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6,8,16 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 October 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The examiner acknowledges a submission of the amendment filed on 10/4/2006. The amendments to claims 6 & 8, cancellation of claims 1-5, 7, 9-15 and new claims 16-26 are accepted.

Election/Restrictions

Newly submitted claims 18-26 are directed to an invention that is independent or distinct from the invention originally claimed for the reasons stated below.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 18-26 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

Group I, claim(s) 6, 8, 16, & 17, drawn to a system and method of switching from a primary source to a backup source.

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Group II, claim(s) 18-26, drawn to a power supply system using an interruption database for coordinating the power supply configuration.

The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group I invention is the specific claimed switching arrangement of the first and second switches claimed therein which is not present in Group II. The special technical feature of the Group II invention is the database which is not present in Group I.

Response to Arguments

The previously made objections to the drawings have been withdrawn in view of the amendments.

The previously made 112 second paragraph rejection of claim 8 has been withdrawn in view of the amendments.

Applicant's arguments with respect to claims 8 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

Claims 8 and 17 are objected to because of the following informalities:

In regard to Claim 8

- The sentence "...starting supplying power from..." is grammatically incorrect and will be interrupted as best understood to mean "...starting to supply power..."

In regard to Claim 17

- The sentence "...wherein the adjusting of the power consumption is adjusting of the load amounts of loads based on a rated capacity of each load and a present load amount of each load" is grammatically incorrect, unclear, and confusing and should be rewritten to clearly and concisely point out that which is being claimed. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6, 8, 16, & 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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In regard to Claims 6 & 8

- It is unclear what is meant by the statement "...in the case where service interruption information is provided in advance..." Specifically, it is unclear what is meant by "service interruption information" as the term is not one normally used in the art. It is unclear exactly what constitutes "service interruption information". The claim will be examined as best understood to mean "the time at which a service interruption is going to take place".

In regard to Claims 6, 8, & 16

- It is unclear what is meant by the phrase "balance-controlling so that the power consumption and the power generation amount get close to each other" the terms "balancing-controlling" and "get close to each other" do not specifically state that which is being balanced and that which is getting close to each other. The claim will be examined as best understood in which the phrase is taken to mean "adjusting either the load or the distributed power source in order to get the amount power required by the load closer to the amount of power supplied by the distributed power source"

In regard to Claims 16 & 17

- It is unclear what is meant by "...based on a rated capacity of each load". In particular, it is unclear what the term "capacity" is referencing. A power supply has a particular supply capacity but the applicant fails to provide the particular

property of the load in which the "capacity" is being referenced making the claim unclear. The claim will be examined as best understood in which the phrase is interpreted to mean "...based on the power consumption of a load..."

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 6, 8, 16, & 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Kern et al. (US 2002/0190576 A1).

Kern et al. (hereinafter referred to as Kern) teaches:

In regard to Claim 6

A power supply system comprising:

- A first switch (61) (See Figure 3) for normally connecting a plurality of loads (74)

[The examiner notes that Kern teaches load shedding and disconnecting portions of the load via circuit breakers thereby teaching a plurality of loads (See Paragraph 66)] with a power supply system at normal times and disconnecting them upon interruption of electrical service, the loads being normally supplied

with power from the power system (Utility) at the normal times and supplied with power from a distributed power source (generator 20a) upon the interruption of the electrical service from the power system (See Figure 3 & Paragraphs 62-63).

- A second switch (44a) for connecting the loads with the distributed power source (20a) upon the interruption of the electrical service (See Figure 3 & Paragraphs 62-63).
- A first control unit (14) for adjusting the power consumption of the plurality of loads (See Paragraph 66).
- A second control unit (16) (See Paragraph 43) for adjusting the power generation amount of the distributed power source (20a).
- A command device (60) (See Paragraphs 49-50) for issuing a command signal to at least one of said first control unit for adjusting the power consumption and said second control unit for adjusting the power consumption, before the interruption of the electrical service begins in the case where service interruption information is provided in advance [The examiner notes that the teaching of Kern are being used in the case where service interruption information is NOT known in advance] and issuing a command signal for turning on said second switch (44a) and then issuing a command signal for turning off said first switch (61) and issuing a command signal to at least one of said first control unit and said second control unit for adjusting either the load or the distributed power source in order to get the amount power required by the load closer to the amount of power supplied by the distributed power source (See Paragraph 66).

In regard to Claim 8

A method for supplying power upon interruption of electric service, the method comprising:

- A first step of adjusting at least one of the power consumption of a plurality of loads and the power generation amount of a distributed power source so that the amount of power required by the load gets closer to the amount of power supplied by the distributed power source in the case where service interruption information is provided in advance [The examiner notes that teaching of Kern is the case where service interruption information is NOT known in advance and therefore step one does not apply] the plurality of loads (74) being normally supplied with power from a power system (utility) (See Figure 3) and supplied with power from the distributed power source (20a) upon interruption of electrical service (See Figure 3 & Paragraphs 62-63).
- Connecting the plurality of loads with the distributed power source and starting to supply power from the distributed power source to the plurality of loads (See Paragraphs 62-63 & 66) [The examiner notes that power supply to the plurality of loads is started when the switch (63) is closed)].
- A third step of disconnecting the plurality of loads from the power system (utility) (See Paragraphs 62-63).
- A forth step of adjusting at least one of the power consumption of the plurality of loads and the power generation amount of the distributed power source so that the power consumption and the amount power required by the load is closer to the

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amount of power supplied by the distributed power source [The examiner notes this is taught by Kern and read on by load shedding] (See Paragraph 66).

In regard to Claim 16

A power supply comprising:

- A first switch (61) (See Figure 3) for normally connecting a plurality of loads (74) [The examiner notes that Kern teaches load shedding and disconnecting portions of the load via circuit breakers thereby teaching a plurality of loads (See Paragraph 66)] with a power supply system at normal times and disconnecting them upon interruption of electrical service, the loads being normally supplied with power from the power system (Utility) at the normal times and supplied with power from a distributed power source (generator 20a) upon the interruption of the electrical service from the power system (See Figure 3 & Paragraphs 62-63).
- A second switch (44a) for connecting the loads with the distributed power source (20a) upon the interruption of the electrical service (See Figure 3 & Paragraphs 62-63).
- A first control unit (14) for adjusting the power consumption of the plurality of loads (See Paragraph 66).
- A second control unit (16) (See Paragraph 43) for adjusting the power generation amount of the distributed power source (20a).
- A command device (60) (See Paragraphs 49-50) for issuing a command signal to at least one of said first control unit for adjusting the power consumption and said

second control unit for adjusting the power consumption, before the interruption of the electrical service begins in the case where service interruption information is provided in advance [The examiner notes that the teaching of Kern are being used in the case where service interruption information is NOT known in advance] and issuing a command signal for turning on said second switch (44a) and then issuing a command signal for turning off said first switch (61) and issuing a command signal to at least one of said first control unit and said second control unit for adjusting either the load or the distributed power source in order to get the amount power required by the load closer to the amount of power supplied by the distributed power source (See Paragraph 66).

- Wherein the first control unit adjusts the load amounts of loads the power consumption of a load and a present load amount of each load in accordance with the command signal [The examiner notes that Kern teaches "only shedding such a portion of load 74 as necessary to allow the generators of power generation system 12 to provide adequate electrical power to the load.

Therefore, the control signal is adjusting the load based on the power drawn by a particular load and the present load amount of the load (See Paragraph 66)].

In regard to Claim 17

A method for supplying power upon interruption of electric service; the method comprising:

- A first step of connecting the plurality of loads with the distributed power source and starting to supply power from the distributed power source to the plurality of loads (See Paragraphs 62-63 & 66) [The examiner notes that power supply to the plurality of loads is started when the switch (63) is closed]]. The plurality of loads being normally supplied with power from a power system (utility) and supplied with power from the distributed power source (generator) upon interruption of electric service.
- A second step of adjusting at least one of the power consumption of the plurality of loads and the power generation amount of the distributed power source so that the power consumption and the amount power required by the load is closer to the amount of power supplied by the distributed power source [The examiner notes this is taught by Kern and read on by load shedding] (See Paragraph 66).
- Wherein the adjusting of power consumption consists of adjusting the amounts of power consumption of a load and a present load amount of each load [The examiner notes that Kern teaches "only shedding such a portion of load 74 as necessary to allow the generators of power generation system 12 to provide adequate electrical power to the load. Kern teaches load shedding which is the adjustment of power consumption is based on the power drawn by a particular load and the present load amount of the load (See Paragraph 66)].

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Cavallari whose telephone number is (571)272-8541. The examiner can normally be reached on Monday-Friday 8:30-5:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571)272-2800 x36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel Cavallari

December 18, 2006


CHAU N. NGUYEN
PRIMARY EXAMINER